



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,333	07/22/2003	Paul T. Van Gompel	659-1095	6978
757	7590	09/29/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			GIBSON, KESHIA L	
			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

88

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/624,333	VAN GOMPEL ET AL.	
	Examiner	Art Unit	
	Keshia Gibson	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 28-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakahata (US 5,873,868).

In regard to Claim 1, Nakahata discloses a disposable undergarment 20/200 comprising a front body panel 46, a rear body panel 44, and a crotch member 48 (Figs 1-2; column 3, lines 13-31). The front body panel 46 comprises a pair of opposite first laterally spaced side edges 50, a first waist edge 52, and a first crotch edge E longitudinally spaced from said first waist edge 52; the rear body panel 46 comprises a pair of opposite laterally spaced second side edges 50, a second waist edge 52, and a second crotch edge E longitudinally spaced from said second waist edge E (Fig. 2 and Fig. A below; column 3, line 13-31). The first and second crotch edges E are longitudinally spaced from each other (Fig. A). The second crotch edge E comprises at least one longitudinally extending slit 206 formed therein (see region P in Fig. B below; column

Art Unit: 3761

11, lines 1-29). A crotch member 48 is connected to the front and rear body panels 46, 44 and further comprises slits 206 (Fig. 2; column 11, lines 1-29). When viewing the undergarment 20 from the garment-facing surface 26, the crotch member 48 covers the slit(s) 206.

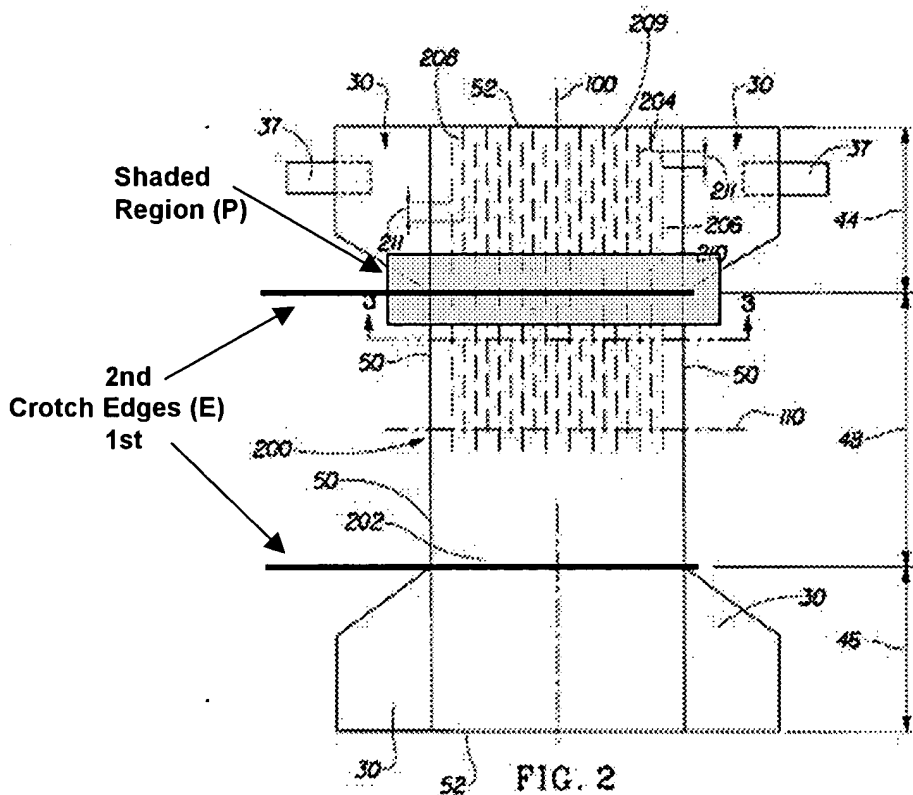


Fig. A: Examiner's mark-up of Nakahata's Fig. 2.

In regard to Claim 2, Nakahata discloses front and rear body panels 46, 44 each comprise a body side surface 24/40 and a garment side surface 26/42 (column 3, lines 13-37; column 4, lines 1-3; column 5, lines 28-31). The absorbent layer 28, body side surface 24/40, and garment side surface 26/42 are depicted as continuous sheets (Figs 1-3). Thus, the absorbent layer 28, body side surface 24/40, and garment side surface

Art Unit: 3761

26/42 of the crotch panel 44 are inherently connected to the absorbent layer 28, body side surface 24/40, and garment side surface 26/42 of each of the front and rear body panels 46, 44, respectively.

In regard to Claim 3, Nakahata discloses that the crotch member 48 comprises a top sheet 24, a back sheet 26, and a retention portion 28 disposed between the top sheet 24 and the back sheet 26. At least one of the top sheet 24 and the back sheet 26 comprises an elastic material 32, 63, 65 (Fig. 1; column 3, lines 13-31; column 9, lines 33-36).

In regard to Claim 4, Nakahata discloses that the slits 206 may comprise an overall pattern that extends over the entire surface of the top sheet 24 (column 12, lines 57-59). Thus, the first and second crotch edges E would comprise a first and second longitudinally extending slit 206 formed therein respectively; and the crotch member 48 would cover the first and second slits 206.

In regard to Claim 5, Nakahata discloses that the crotch member 48 comprises opposite sides 50. These opposite sides 50 further comprise elastic gasketing cuffs 63 (formed from elastic strands 65) (column 9, lines 33-36). These elastics 65 are implicitly intended to create tension within the panels for better fit around the wearer's leg; as a result, these elastics create gathers or folds within the panels 44, 46, 48 along either side of the elastics 65. The elastics 65 extend longitudinally through all three panels 44, 46, 48. Because the crotch member 48 comprises multiple slits along a majority of its transverse length (Figs. 2-3) and the elastics 65 are attached at the opposite sides 50 of the panels 44, 46, 48, some of the slits 206 existing in the crotch panel 48 lie between

Art Unit: 3761

the elastics 65 attached at the opposite sides 50 of the crotch member 48. As a result, some of the slits 206 lie between the folds created along the length of the elastics 65.

Thus, the crotch member 48 is disclosed as having at least one fold formed along each of its opposite sides 50, the at least one fold are connected to the front and rear body panels 46, 44 on opposite sides 50 of said slit 206.

In regard to Claim 6, Nakahata discloses that the rear body panel 44 comprising slits 206, further comprises a back sheet 26 made of an elastic material (Figs. 2-3; column 4, line 33—column 4, lines 3). The rear body panel 44 is expandable between at least a first and second condition Fig. 2, Fig. 3, wherein a pair of edges defining the slit 206 are substantially abutted when the rear body panel 44, comprising an elastic material, is in the first condition Fig. 2, and wherein the pair of edges defining the slit 206 are separated when the rear body panel 44, comprising an elastic material, is in said second condition Fig. 3 (Figs. 2-3; column 11, lines 1-37).

In regard to Claims 7-8, as discussed earlier, the absorbent layer 28, body side surface 24/40, and garment side surface 26/42 are depicted as continuous sheets (Figs 1-3). Thus, the crotch member 48 is inherently attached to the front and rear panels 46, 44 of each respective layer 28, 24/40, 26/42 of the undergarment 1, whether the body panel is in a first Fig. 2 or second Fig. 3 condition.

In regard to Claim 13, the Examiner has interpreted “at least one fastener member” to be analogous to “one fastening system.” Nakahata discloses that the undergarment 20 comprises a fastening system 36 (Fig. 1; column 8, lines 21-52).

Art Unit: 3761

In regard to Claim 14, the Examiner has interpreted "at least one fastener member comprises a pair of fastener members" to be analogous to "at least one fastening system comprises a pair of fastener members." Nakahata discloses that the fastening system 36 comprises a pair of fastener members 37 (Figs. 1-3; column 8, lines 21-52).

3. Claims 1-3, 5-8 and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakahata (WO 03/003961 A1).

In regard to Claim 1, Nakahata et al. disclose a disposable undergarment 20 comprising a front body panel 45, a rear body panel 43, and a crotch member 47. The front body panel 45 comprises a pair of opposite first laterally spaced side edges 50, a first waist edge 52 and a first crotch edge (dotted line between front body panel 45 and crotch panel 47 in Fig. 2) longitudinally spaced from said first waist edge 52 (Figs. 1-2). The rear body panel 43 comprises a pair of opposite laterally spaced second side edges 50, a second waist edge 52 and a second crotch edge (dotted line between rear body panel 43 and crotch panel 47 in Fig. 2) longitudinally spaced from said second waist edge 52 (Figs. 1-2). The first and second crotch edges are longitudinally spaced from each other (Fig. 2). The second crotch edge comprises at least one longitudinally extending slit 206 formed therein (Figs. 4-6; Fig. B below). The crotch member 47 connected to the front and rear body panels 45, 43 and covers at least one of the slits 206 (Figs. 1-2, Fig. B below). When viewed for the body-facing surface (such as in Fig. 1), the crotch member covers the slits 206.

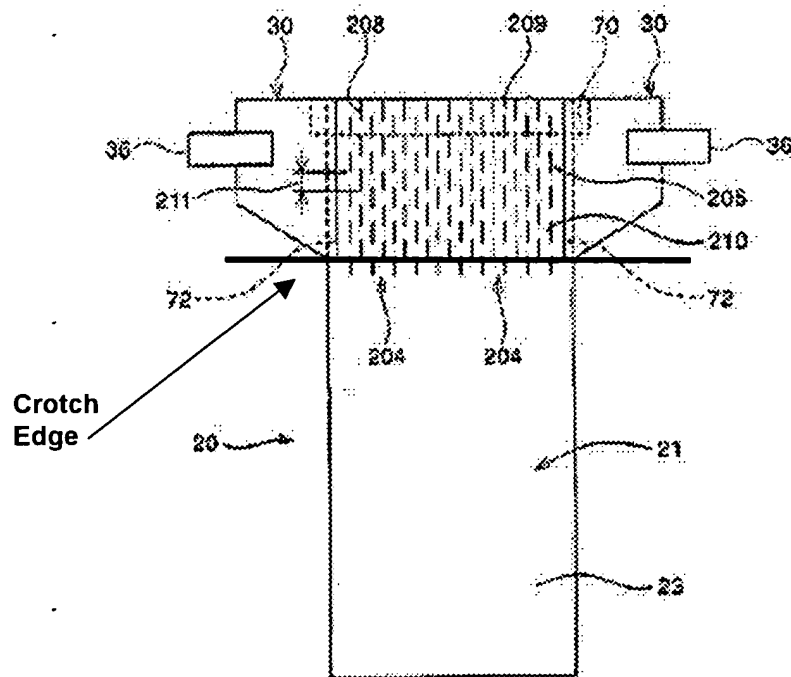


Fig. 4

In regard to Claim 2, Nakahata et al. disclose that the front and rear body panels 45, 43 each comprise a body side surface (analogous to a top sheet) 24 and a garment side surface (analogous to a back sheet) 21. Since the back sheet is depicted as a single, continuous layer, the crotch member 47 of the garment side surface 21 is inherently connected to said garment side surface 21 of each of said front and rear body panels 45, 43 (Fig. 4-6).

In regard to Claim 3, Nakahata et al. disclose that the crotch member 47 comprises a top sheet 24, a back sheet 21 and a retention portion 28 disposed between said top sheet 24 and said back sheet 21 (page 4, lines 31-35). The both the top sheet 24 and



Art Unit: 3761

the back sheet 21 may comprise an elastic material (page 12, lines 12-29; page 6, lines 30-31).

In regard to Claim 5, Nakahata et al. discloses that the crotch member 47 comprises opposite sides 50. These opposite sides 50 further comprise elastic gasketing cuffs 63 (Fig. 1; page 15, line 29—page 16, line 18). The elastics in the cuffs 63 are implicitly intended to create tension within the panels for better fit around the wearer's leg; as a result, these elastics create gathers or folds within the panels 43, 45, 47 along either side of the elastic. The elastics extend longitudinally through all three panels 43, 45, 47 (Fig. 1). Because the crotch member 48 comprises multiple slits along a majority of its transverse length (Figs. 2-3) and the elastics are attached at the opposite sides 50 of the panels 43, 45, 47, some of the slits 206 existing in the crotch panel 47 lie between the elastics attached at the opposite sides 50 of the crotch member 47. As a result, some of the slits 206 lie between the folds created along the length of the elastics. Thus, the crotch member 47 is disclosed as having at least one fold formed along each of its opposite sides 50, the at least one fold are connected to the front and rear body panels 45, 43 on opposite sides 50 of said slit 206.

In regard to Claim 6, Nakahata discloses that the rear body panel 45 comprising slits 206, further comprises a back sheet 21 made of an elastic material (Figs. 4-6 and Fig. B; page 6, lines 30-31). The rear body panel 45 is expandable between at least a first and second condition Fig. 4, Fig. 5, wherein a pair of edges defining the slit 206 are substantially abutted when the rear body panel 45, comprising an elastic material, is in the first condition Fig. 4, and wherein the pair of edges defining the slit 206 are

Art Unit: 3761

separated when the rear body panel 45, comprising an elastic material, is in said second condition Fig. 5 (Figs. 4-6; page 9, line 27—page 10, line 16).

In regard to Claims 7-8, as discussed earlier, the absorbent layer 28, body side surface 24, and garment side surface 21 are depicted as continuous sheets (Figs 4-6). Thus, the crotch member 47 is inherently attached to the front and rear panels 45, 43 of each respective layer 28, 24, 26 of the undergarment 1, whether the body panel is in a first Fig. 4 or second Fig. 5 condition.

In regard to Claim 12, Nakahata et al. disclose that the absorbent layer 28 may be joined to the back sheet 21 along a longitudinally center line (page 12, line 35—page 13, line 2). Thus, the absorbent layer 28 of the crotch member 47 may be minimally attached to the front and rear body panels 45, 43 along a longitudinally extending centerline of said crotch member 47.

In regard to Claim 13, the Examiner has interpreted “at least one fastener member” to be analogous to “one fastening system.” Nakahata discloses that the undergarment 20 comprises a fastening system 36 (Figs. 1-2, 4-6; page 15, lines 5-28).

In regard to Claim 14, the Examiner has interpreted “at least one fastener member comprises a pair of fastener members” to be analogous to “at least one fastening system comprises a pair of fastener members.” Nakahata discloses that the fastening system 36 comprises a pair of fastener (securement) members (Figs. 1-2, 4-6; page 15, lines 5-28).

Art Unit: 3761

4. Claims 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Snyder (US 3,895,629).

In regard to newly added Claims 28 and 30, Snyder discloses an undergarment comprising front and rear body panels 10, 12 having side edges (unmarked), waist edges 14, 16, crotch edges (associated with elements 54/56/60, 38/40/44) having slits 42/58/68; the undergarment further comprises crotch member 70 having longitudinally-spaced terminal edges (unmarked) and covering the slits 42/58/68, which are formed through the entire thickness of the crotch edges (whole document, especially Figs. 1-4 and 8).

In regard to newly added Claim 29, the crotch member has a topsheet, backsheet, and retention portion (all unmarked) (Fig. 5, column 3, lines 37-51).

5. Claims 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Wyant (US 5,843,065).

In regard to newly added Claims 28-31, Wyant discloses an undergarment 1 comprising front and rear panels 3, 5—one panel having a slit 67—side edges (unmarked), and longitudinally-spaced crotch edges (as similarly defined in the previously cited prior art discussions); the crotch edges having terminal edges longitudinally-spaced from the panel crotch edges and covering the slit 67 (whole document). A crotch member 51 comprises a topsheet 57, backsheet 53, and a retention portion 55 and is attached to the panels so as to cover the slit 67 (especially see Figs. 3-4 and 6). The panels 3, 5

Art Unit: 3761

comprise first and second layers 25, 21; the slit 67 extends through the entire thickness of the crotch edge of the first and second layers (especially see Fig. 1, 2, 4, and 6).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahata '868 or Nakahata '961.

Nakahata '868 discloses the claimed invention except for ratios relating the lengths of the front and rear body panels 46, 44 (first and second lengths) to the lengths of the slits 206 (third length). Nakahata disclose a range of lengths for the slits and also teaches that the configuration of the slits affects the overall performance (mainly the extensibility) of the diaper when placed under tension (column 11, line 1—column 12, line 29).

Nakahata '961 discloses the claimed invention except for ratios relating the lengths of the front and rear body panels 45, 43 (first and second lengths) to the lengths of the slits 206 (third length). Nakahata disclose a range of lengths for the slits and also teaches that the configuration of the slits affects the overall performance (mainly the extensibility) of the diaper when placed under tension (page 8, line 11—page 11, line 9).

Art Unit: 3761

Thus, it would have been obvious to one of ordinary skill in the art to provide the length of the slit with a length that is between about 5% and about 75%, a length that is between about 10% and about 50%, or a length that about 15% and about 30% of the length of either the front or rear panels, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

8. In the previous action, the Examiner failed to identify the publication number of the Nakahata reference applied as a 102(e) reference. The Examiner apologizes for this oversight. Applicant was correct in the assuming that the publication number of the reference is WO 03/003961 A1. Applicant further states that this reference is more accurately applied under 102(a), and not under 102(e) as applied by the Examiner. However, the examiner points out that WIPO/PCT applications are applicable under 102(e) if they meet the following requirements: 1) filed after November 29, 2000, 2) designated the US, and 3) published in English. If applicant feels that the Nakahata WO 03/003961 A1 the applicant is welcomed to readdress the issue. Examiner is currently maintaining application of this reference under 102(e), as presented above.

9. Applicant's arguments filed 7/21/05 have been fully considered but they are not persuasive.

10. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies

Art Unit: 3761

(i.e., the article is formed from separate discontinuous components and the panels of the article overlap) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

11. Applicant has further argued that the lines previously defined by the Examiner are not edges, however, an edge has been interpreted to mean "the boundary of a surface or a region" or "to lie adjacent to another or share a boundary." As such, the lines defined by the Examiner define the boundaries shared by each of the panels and crotch member.

At least one of the slits extends into the crotch region as previously defined by the Examiner and is therefore covered by at least a portion, if not by all, of the crotch region (see figures previously marked up by the Examiner). This limitation may not be explicitly disclosed, but is implicitly from the disclosure—including the figures.

In regard to applicant's arguments to Claim 2, the retention layer is connected to the backsheet (garment-facing surface) and topsheet (body-facing surface), so the topsheet, backsheet, and retention layer of each of the front panel, rear panel, and crotch member are all connected to one another. (It is anticipated that this explanation will also clear up some other points of confusion in relation to the examiner's interpretation of the prior art).

In regard to arguments for Claim 5, the claims says nothing of "waist regions," but it is assumed this is to be equivalent to "body panels." The elastics create a series

of (vertical) folds—or overlaps—that extend from the crotch member into the front panel and rear panel.

In regard to Claims 7-8, if the object is continuous, then all portions of the object are interconnected. As previously pointed out, each of the layers is formed from a continuous sheet, so each part (in this case, front panel, crotch member, and back panel) of each layer (topsheet, backsheet, and retention layer) is connected to each other.

Despite applicant's arguments, both Nakahata references are still considered to anticipate and/or render obvious the structural limitations set forth in Claims 1-14 of the claimed invention, as presented in the previous Office Action (which has been modified, in view of applicant's amendments, and presented again above).

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Otsubo (US 6911106, 20040040642, and 20020151864).

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 3761

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keshia Gibson whose telephone number is (571) 272-7136. The examiner can normally be reached on M-F 8:30 a.m. - 6 p.m., out every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Keshia Gibson  
Examiner, Art Unit 3761

klg 9/26/05

TATYANA ZALUKAEVA  
PRIMARY EXAMINER

